

**What is claimed is:**

1. An automatic software component creating system comprising:

a software component definition data storage section which stores software component definition

5 data therein;

a software component creation rule storage section which stores software component creation rules therein;

a client program creation rule storage section  
10 which stores client program creation rules therein;

a software component creating section which creates a software component module with one or more software components based on said software component definition data and said software component creation  
15 rules in response to a start instruction; and

a client program creating section which creates a client program source code based on said software component definition data, said software component module, and said client program creation rules, when  
20 said software component module is created.

2. The automatic software component creating system according to claim 1, wherein said software component definition data includes one module data which includes at least one component data, which  
5 includes at least one method data, which includes at

least one parameter data.

3. The automatic software component creating system according to claim 2, wherein said module data has a module name,

said component data has component data and  
5 component attribute data,

said method data has a method name, method attribute data, method call format data, and method call order data, and

said parameter data has a parameter name, a  
10 parameter type, and a parameter type data.

4. The automatic software component creating system according to claim 2, further comprising:

a software component defining section which defines said software component definition data from  
5 inputted data to store in said software component definition data storage section.

5. The automatic software component creating system according to claim 4, wherein said software component defining section comprises:

a component data defining section which  
5 defines said component data associated with said module data from said inputted data;

a method data defining section which defines

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said method data associated with said component data  
from said inputted data; and

10           a parameter data defining section which defines  
said parameter data associated with the method data  
from said inputted data.

6.       The automatic software component creating  
system according to claim 1, wherein said software  
component creating section comprises:

          a parameter creating section which creates  
5   parameter(s) from said software component definition  
data and parameter creation rules in response to a  
parameter creation request;

          a method creating section which generates said  
parameter creation request which creating method(s)  
10   from said software component definition data and  
method creation rules in response to a method creation  
request;

          a component creating section which generates  
said method creation request while creating  
15   component(s) from software component definition data  
and component creation rules in response to a  
component creation request; and

          a module creating section which generates said  
component creation request while creating said  
20   software component module from said software component  
definition data and module creation rules.

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5 creates declaration and definition of each of said parameters corresponding to a method to be called from a client program from said software component definition data and parameter definition creation rules of said client program creation rules in  
10 response to a parameter definition creation request;  
a pre-process creating section which creates a pre-process which needs to be executed prior to a call of said software component based on said software component definition data and pre-process creation  
15 rules of said client program creation rules in response to a pre-process creation request;  
a component call creating section which creates a call process of each of said methods of said software component based on said software component  
20 definition data and component call creation rules of said client program creation rules in response to a component call creation request; and  
a post-process creating section which creates a post-process, which needs to be executed after the  
25 call of said software component based on said software component definition data and post-process creation rules of said client program creation rules in response to a post-process creation request; and  
a client module creating section which creates  
30 a framework of said client program source code based on said software component definition data and client

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9. An automatic software component creating method comprising the steps of:

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11. The automatic software component creating method according to claim 10, wherein said module data has a module name,

said component data has component data and  
5 component attribute data,

said method data has a method name, method attribute data, method call format data, and method call order data, and

said parameter data has a parameter name, a  
10 parameter type, and a parameter type data.

12. The automatic software component creating method according to claim 10, further comprising the step of:

(c) defining said software component definition  
5 data from inputted data.

13. The automatic software component creating method according to claim 12, wherein said (c) defining step comprises the steps of:

defining said component data associated with  
5 said module data from said inputted data;

defining said method data associated with said component data from said inputted data; and

defining said parameter data associated with the method data from said inputted data.

14. The automatic software component creating method according to claim 9, wherein said (a) creating step comprises the steps of:

(d) generating a component creation request  
5 while creating said software component module from said software component definition data and module creation rules of said software component creation rules;

(e) generating a method creation request while  
10 creating component(s) from software component definition data and component creation rules of said software component creation rules in response to said component creation request;

(f) generating a parameter creation request  
15 which creating method(s) from said software component definition data and method creation rules of said software component creation rules in response to said method creation request; and

(g) creating parameter(s) from said software  
20 component definition data and parameter creation rules in response to said parameter creation request.

15. The automatic software component creating method according to claim 9, wherein said (b) creating step comprises the steps of:

(h) creating declaration and definition of each  
5 of said parameters corresponding to the method to be

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process creation request, said component call creation request and said post-process creation request.

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